

ENROLLMENT HANDBOOK



U.S. Environmental Protection Agency

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Office of Solid Waste
<http://www.epa.gov/wastemin>

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I. Introduction to This Handbook and EPA's National Waste Minimization Partnership Program

This Handbook helps EPA Region and State program staff and managers identify and enroll partners in the National Waste Minimization Partnership Program. The National Waste Minimization Partnership Program encourages EPA, state and local governments, manufacturers and other commercial companies, and/or non-governmental organizations to form voluntary partnerships that reduce the generation of hazardous wastes containing any of 30 [Waste Minimization Priority Chemicals](#) (WMPCs) using waste minimization (i.e., source reduction and/or recycling) methods. Scientific data indicate WMPCs can accumulate over long periods of time and cause serious harm to plants, animals, and humans when released to the environment.



EPA's [National Waste Minimization Goal](#) is to reduce the quantity of WMPCs found in hazardous waste by 50 percent by 2005, compared to a 1991 baseline. TRI data indicate hazardous waste generators reduced quantities of WMPCs generated in hazardous waste by 42 percent between 1991 and 1996; from 152 million pounds in 1991, to 108 million pounds in 1996. However, that trend has remained relatively flat since 1996, and increased slightly, to 115 million pounds in 2000. In 2000, over 3,600 facilities reported quantities of hazardous wastes to the TRI that contained one or more WMPCs. Some facilities reported as many as 12 WMPCs in their wastes.

There is still much to do to reach the National WMPC reduction goal by 2005. More on progress toward the National Goal can be found in the Waste Minimization Trends Report at <http://www.epa.gov/epaoswer/hazwaste/minimize/wastesrc.htm>.

Companies interested in becoming a [Waste Minimization Partner](#) are eligible to receive public recognition for their contribution to the National Waste Minimization Partnership reduction goal. Several [companies](#) have already enrolled!

The National Waste Minimization Partnership Program is a major component of EPA's Resource Conservation Challenge (more on EPA's National Waste Minimization Partnership Program, WMPCs, EPA's National WMPC reduction goal, and the Resource Conservation Challenge at <http://www.epa.gov/epaoswer/hazwaste/minimize>).

This Handbook provides information on how to identify, enroll and provide followup support to organizations that choose to become partners in the NWMPP. The information provided in this Handbook is divided into three major sections:

- the recruitment and enrollment process;
- post enrollment activities; and
- enrollment forms and data.

A note on resource requirements: The resource requirements for this program are modest compared to many other RCRA program components. Based on current enrollment data, it takes about 60 hours, or 1.5 work weeks, of staff time to create a list of candidate partners and complete the enrollment process for three of them, and about another 30 hours of staff time to complete post enrollment follow up and support activities. Resource estimates for the enrollment process are provided in Exhibit 11 in the Appendix of this Handbook.

II. The Recruitment and Enrollment Process

There are several steps involved in identifying potential candidates, inviting candidates to become a member, and enrolling members in the National Waste Minimization Partnership Program (WMNP). The steps involved are summarized below, and are followed by more detailed descriptions.

- A. Develop an enrollment network or team in each Region;
 - B. Develop an initial contact list;
 - C. Contact plant managers to explore partnership possibilities; and
 - D. Enroll facilities that meet partnership criteria.
- A. **Develop an enrollment network or team** in each EPA Region. Setting up an enrollment network or team within each Region is encouraged. Front line staff and managers in EPA, State, County, City, and Tribal environmental program offices are best positioned to identify candidate partners and facilitate the process of setting up meaningful voluntary partnerships. Regions that meet on a regular basis with their State program managers could form an enrollment team within the existing State/EPA agreement structure. The resource estimates noted above and discussed in more detail in Exhibit 11 in the Appendix could assist in resource planning.
- B. **Develop an initial contact list** of facilities that could be candidate partners. The three criteria listed below should serve as the primary tool for identifying creating an initial list of candidate partners.
1. **Available data indicates the facility generates a significant volume of WMPCs in its hazardous waste.** In most cases, candidate partners will be identified from available TRI data, or BRS data in cases where a facility identifies quantities of WMPCs contained in hazardous waste streams generated at the facility.
 2. **A facility must be able to reduce the generation of WMPCs in hazardous waste using source reduction and/or recycling methods.** In some cases, expert knowledge of manufacturing processes can help make an engineering best guess about whether waste minimization methods are/are not likely to be helpful in reducing WMPC waste generation. This step may need to be deferred until the facility is contacted in many cases.
 3. Other categories of facilities that may qualify for partnership.

These criteria are discussed further below.

1. **Available data indicates the facility generates a significant volume of WMPCs in its hazardous waste.** In most cases, candidate partners will be identified from available TRI data, or BRS data in cases where a facility identifies quantities of WMPCs contained in hazardous waste streams generated at the facility.

TRI is the best data source for identifying facilities that generate hazardous wastes containing WMPCs. TRI data for the 2000 reporting year indicate over 3,600 facilities nationwide generated hazardous wastes containing more than 115 million pounds of WMPCs. Some of those facilities generated containing as many as 12 WMPCs in 2000.

TRI data for individual facilities that reported WMPCs in hazardous waste are provided in PDF format at: <http://www.epa.gov/epaoswer/hazwaste/minimize/trends.htm#indfac>

It is important to note that TRI tracks only 20 of the 30 WMPCs that have been found in hazardous wastes. The table below displays WMPCs that are/are not reported to the TRI.

WMPCs Reported/Not Reported to the TRI	
WMPCs Reported to the TRI since 1988	
Anthracene	Mercury and mercury compounds
Cadmium and cadmium compounds	Methoxychlor
Dibenzofuran	Naphthalene
Heptachlor	Pentachlorophenol (PCP)
Hexachloro-1,3-butadiene	Quintozone (Pentachloronitrobenzene)
Hexachlorobenzene	1,2,4-Trichlorobenzene
Hexachloroethane	2,4,5-Trichlorophenol
Lead and lead compounds	Trifluralin
Lindane	
WMPCs Added to the TRI in 1995	
Pendimethalin	TRI polycyclic aromatic compound (PAC) category
Phenanthrene	
WMPCs Added to the TRI in 2000	
Benzo(g,h,i)perylene	Dioxins and dioxin-like compounds
Pentachlorobenzene	
WMPCs Not Reported to the TRI	
Acenaphthene	Fluorene
Acenaphthylene	Heptachlor epoxide
4-Bromophenyl phenyl ether	Pyrene
Endosulfan, alpha,	1,2,4,5-Tetrachlorobenzene
Endosulfan, beta	

Background information on EPA's TRI Public Data Release can be found at <http://www.epa.gov/tri/tridata/tri00/index.htm>.

RCRA Biennial Reporting System (BRS) data can be used to supplement TRI data. For example, TRI provides data on quantities of WMPCs found in hazardous wastes, however, it does not identify production processes or waste types that might be helpful for identifying possible waste minimization opportunities. In contrast, BRS identifies general categories of production processes that generate hazardous waste and general waste forms that may be useful for identifying possible waste minimization opportunities. BRS does not provide data on the quantities of WMPCs contained in hazardous waste, and therefore is not useful for measuring WMPC reductions.

BRS could also be helpful for working with facilities that generate any of the 10 WMPCs not tracked by TRI. However, these facilities must commit to measuring or estimating (in a manner similar to TRI's estimation method) quantities of WMPCs in hazardous waste; and they must describe their estimation method to be eligible for partnership.

2. **Facilities must be able to reduce WMPCs in hazardous waste using source reduction and/or recycling methods:** The second criteria for placing facilities on an initial contact list the facility's ability to make significant reductions of WMPCs in hazardous waste using source reduction and/or recycling methods. Determining which facilities have this potential requires being familiar with facilities' manufacturing processes, their waste minimization history, or having generic knowledge about similar facilities that have used waste minimization methods. Since this information is not always available prior to contacting a company, it may be necessary to defer this step until you make contact with the facility.

Using both criteria discussed above may help reduce unproductive efforts to contact potential partners. For example, TRI data may indicate facilities in SIC 3312 (steel manufacturers that use electric arc furnaces to melt down scrap steel to manufacture new steel) generate large quantities of lead in their hazardous wastes. Most lead bearing waste generated by these facilities comes from the electric arc furnace process that is used to melt down scrap steel and manufacture new high grade steel. The lead bearing dust generated by this process is regulated as a hazardous waste (K061). Nearly all of the scrap steel used as the principal raw material in this process contains lead contamination. Therefore, it would be nearly impossible to use source reduction measures to reduce lead contamination in raw materials. Furthermore, current RCRA Land Disposal Restrictions (LDR) regulations already require these facilities to capture and recycle electric arc furnace dust generated by these facilities. Consequently, facilities in SIC 3312 may be among the highest generators of WMPC bearing hazardous wastes, but may not be among the best candidates for making WMPC reductions using source reduction and/or recycling methods, compared to facilities in other SIC groups.

In this step, using in-house engineering knowledge, or working with State pollution prevention technical assistance experts to set priorities among facilities on initial contact lists is encouraged. If this is not feasible, skip this step.

3. **Other categories of facilities that could qualify for partnership on a case by case basis.**

- a. **Facilities that do not report to TRI but participates in another voluntary environmental program.** Facilities that participate in environmental programs, such as Department of Commerce's Manufacturing Extension Service Program, EPA's Leadership Track, or a State Governor's Award program, could be considered for partnership if the facility commits to measuring or estimating quantities of WMPCs in its hazardous waste and describes its estimation method in its partnership agreement.
- b. **Facilities that propose to reduce significant quantities of highly toxic chemicals (other than WMPCs) in their hazardous wastes.** Some facilities may approach EPA and request membership in the NWMPP based on their commitment to reduce significant quantities of toxic chemicals contained in their hazardous wastes. EPA may consider these facilities for membership; however, the facility's reductions do not count toward the National WMPC reduction goal. In these cases, EPA must be able to focus limited program resources on facilities that make significant reductions in WMPCs as its top NWMPP priority.
- c. **Organizations that are not hazardous waste generators may be considered for partnership on a case by case basis** if they provide direct technical assistance or other resources to hazardous waste generators that are NWMPP partners or candidate partners. Organizations in this category could include, for example, local or tribal governments, universities, and/or non-governmental organizations (NGOs), and would probably not be an initial contact list. For example, a university technical assistance program may be eligible for partnership if it helps a manufacturing facility reduce the amount of naphthalene generated in its hazardous waste. In this example, the university technical assistance program may assist the manufacturing facility by completing a waste minimization opportunity assessment, helping the company redesign a manufacturing process, locating equipment vendors, assisting in equipment testing and installation, documenting a success story study for the facility, and/or other tasks that are necessary for achieving the hazardous waste generator's WMPC reduction goal.
- d. **Facilities engaged in waste minimization activities that are part of enforcement related Supplemental Environmental Projects (SEPs)** may be considered for partnership if enforcement managers believe this is appropriate. Compliance criteria are discussed further below.

C. **Contact facilities on the initial contact list** to describe the program and explore partnership possibilities. Here are some ideas that may be useful to describe the program, and to explain the benefits of being a partner.

1. **Key points for describing the NWMPP program.**

- a. Membership is completely voluntary. Members can revise goals, or withdraw at any time without penalty.
- b. Eligibility is based on three commitments. Members must:
 - (1) Identify hazardous wastes that contain one or more Waste Minimization Priority Chemicals. Facilities that propose to reduce toxic chemicals that are not WMPCs may be considered for membership; however, reductions of these wastes do not count toward the National WMPC reduction goal. EPA must focus limited program resources on facilities that make significant reductions in WMPCs as its top NWMPP priority.
 - (2) Identify possible source reduction and/or recycling measures that could be used to reduce the amount of WMPC generated in hazardous wastes; and
 - (3) Set a voluntary reduction goal and project time line for each WMPC targeted for reduction.

2. **Describe the benefits of becoming a partner.** A universal question all facilities want answered is: “What’s in it for us?” There are several generic answers to this question: These are described in the bullets below. However, in addition answering generic questions about the benefits of this program, some facility managers may have more specific questions. For example, how could this program help reduce operating costs, improve compliance, enhance community relations, and/or respond to worker health and safety concerns. The more you know about what the company manufactures, and the technical, economic and/or environmental challenges it faces, the more credible you become.

Key points to keep in mind when describing the program and its benefits:

- a. Building corporate image may be a top priority. The NWMPP offers national recognition, awards, and the opportunity to post success stories on a national website;
- b. Waste minimization has a long track record of helping companies save money and improve compliance;
- c. The program offers a “win-win” opportunity for the company, the environment and the public.
- d. Making voluntary environmental improvements achievements can be a popular and refreshing alternative to permit and regulatory requirements;

- e. Providing the opportunity for company employees to identify process changes that improve product quality and reduce waste is rewarding, and provides employees a chance to be recognized;
- f. Having the opportunity to advertise technical achievements and/or learn about technical advances from others can be a motivator; and
- g. The program provides an opportunity for internal promoters (in government and/or corporate organizations) of advanced manufacturing and waste minimization methods to advocate cleaner, smarter, cheaper ways of operating; and
- h. The program provides an opportunity for companies to influence EPA's understanding of constraints on technological innovation, and could (in cases where there is broad applicability to multiple companies in an industry) lead to an exploration of regulatory relief.

These points are explained further below.

- a. **Building corporate image may be a top priority.** The NWMPP offers national recognition, awards, and the opportunity to post success stories on a national website. These tools may be attractive opportunities for corporate managers to enhance their corporate image. When a facility becomes enrolled as a Waste Minimization Partner, you will be able to present the facility with an enrollment plaque that recognizes their participation. At the facility's request, EPA will send notification of their enrollment to their local newspaper or other media source. The facility's partnership agreement and any progress reports they choose to share will be posted on EPA's National Waste Minimization website (<http://www.epa.gov/wastemin>). When a partner reaches its goal, they are eligible to receive an Achievement Award by submitting a case study that documents their accomplishments.
- b. **Waste minimization has a long track record of helping companies save money and improve compliance.** Waste is lost raw material, lost product, and lost profit. In many cases, waste minimization can reduce losses, improve the bottom line and improve environmental results. EPA's Waste Minimization website (<http://www.epa.gov/wastemin>) provides links to many companies that have saved money using waste minimization measures.
- c. **The program offers a "win-win" opportunity for the facility, the environment and the public.** The facility gets to be in charge of setting its own WMPC reduction goals and managing its WMPC reduction project; and the public benefits from a cleaner environment and fewer long term health and ecological impacts. Facility managers may appreciate the relative ease of being involved in the NWMPP and the idea that EPA is not asking them to spend money or become involved in compliance requirements. Companies already engage in waste minimization activity may be already positioned to set and achieve goals that could earn recognition through this program.

- d. **Making voluntary environmental improvements achievements can be a popular and refreshing alternative to permit and regulatory requirements.** EPA's Resource Conservation Challenge, of which the NWMPP is a major component, encourages voluntary conservation of valuable resources through waste reduction and energy recovery activities that improve public health and the environment; and recognizes that EPA's strong regulatory base continues to serve as a backdrop for protecting the environment.

Industry is also aware that environmentally-conscious consumers are looking for products and services produced by environmentally conscious companies using sound environmental practices. Other voluntary programs, such as Energy Star, have demonstrated this approach works. As the NWMPP grows, and its logo gains recognition, the value of being a NWMPP partner will increase.

- e. **The program provides an opportunity for company employees** to identify process changes that improve product quality and reduce waste, and provides employees a chance to be recognized. Company managers know that employees can often spot opportunities for improvement more easily than someone who is unfamiliar with the process. This program provides an opportunity for managers to involve employees in identifying process improvements and gain recognition.
- f. **Sharing technical achievements and/or learning about technical advances from others is important.** The NWMPP web page (<http://www.epa.gov/wastemin>) provides links to technical and environmental assistance websites sponsored by EPA, State and local government agencies, non-governmental organizations, and university technical assistance programs throughout the country. Partners get to share success stories and learn about technical achievements of other members.
- g. **The program provides an opportunity for internal promoters (in corporate and/or government organizations) of advanced manufacturing and waste minimization methods** to advocate cleaner, smarter, cheaper ways of operating. Corporate and government managers compete within their organizations for limited resources to promote their projects and programs. Adding the imprimatur of being a member of the NWMPP (and even greater recognition for achieving an environmental goal in the NWMPP) provides backing for managers who advocate [advanced manufacturing](#) and waste minimization methods.
- h. **The program provides an opportunity for companies to influence EPA's understanding of constraints on technological innovation**, and could (in cases where there is broad applicability to multiple companies in an industry) lead to an exploration of regulatory relief. EPA is aware that some of its hazardous waste regulations may provide a disincentive to try new approaches in manufacturing, and has set up projects to explore avenues for regulatory relief in cases where a broad spectrum of companies would benefit from a regulatory change. For example, by

working with metal finishing companies, EPA was able to identify and relax waste storage and transportation restrictions that inhibited reclamation of valuable metals from metal finishing wastes. (see <http://www.epa.gov/epaoswer/hazwaste/gener/f006acum.htm>). EPA is willing to consider exploring regulatory changes to provide further incentives for waste minimization.

D. Enroll Facilities that are Interested in Becoming Partners. If a facility expresses interest, walk them through the enrollment process. The steps are not complicated.

1. Fill out an enrollment application;
2. Acknowledgement of Receipt of Application;
3. Application Review;
4. Transmit results of the application review; and
5. Notify Facility of Membership Approval, and Present Membership.

These steps are described further below.

1. **Fill out an enrollment application.** Candidate members have three options for completing an enrollment application. They can:
 - a. Use the on-line enrollment form to submit an application electronically;
 - b. Download the enrollment form [PDF, 21 KB] and send it to EPA using U.S. Mail or other delivery service; or
 - c. Request a program information package, fill out the form contained in the information package, and send it to EPA.

Samples of enrollment forms are provided in Exhibits 1 and 2 in the Appendix of this Handbook. Enrollment forms and information on enrollment can be found at <http://www.epa.gov/epaoswer/hazwaste/minimize/join.htm>

2. **Acknowledgement of Receipt of Application.** When an application is received, EPA HQ will send an acknowledgement. A copy of the application and acknowledgement will be forwarded to the Regional and State contacts.
3. **Application Review.** When an application is received, the State/Regional contact must review the applicant's enrollment form against several criteria:
 - a. **Is the enrollment form complete?** The section on company information and at least one goals section must be complete. See Exhibits 2 and 3 in the Appendix for examples. If clarifications or additional information is needed, contact the applicant directly, discuss the information that needs to be clarified and/or completed and as the

enrollee to resubmit an amended enrollment form. Complete the review using the amended enrollment form.

- b. **Has the facility identified at least one WMPC reduction goal?** Would a reasonable person agree the goal is meaningful and nontrivial? Is the narrative description of the reduction project written in language that is clear and understandable to the average reader? Is at least one source reduction and/or recycling method identified? Has a target date for achieving the goal been identified?
- c. **Are there unresolved compliance issues** at a facility that would prevent enrollment in the NWMPP? Regions and States are encouraged to complete a compliance screen to protect against embarrassing or legally compromising situations. For example, it would be inappropriate for EPA to publicly recognize a facility for its environmental achievements in the NWMPP while the EPA or a State is simultaneously prosecuting a serious civil or criminal violation at that facility.

The compliance screen should look at corporate-wide compliance profiles. It would be inappropriate to publicly recognize the environmental achievements of a corporation, based on reductions of WMPCs at one facility, while EPA is simultaneously prosecuting a serious civil or criminal violation at another of the corporation's facilities.

The compliance screen is designed to be fair and flexible. These criteria are taken from EPA's *Compliance Screening for EPA Partnership Programs Guidance* (see <http://www.epa.gov/partners/resource/ppsguide.pdf>), and are summarized in Exhibit 8 in the Appendix of this Handbook. Exhibit 9 provides examples of compliance screening results that could apply to the NWMPP. In most cases, EPA Regions and States are best positioned to make case by case compliance screening decisions. Questions or issues regarding particular applicants should be directed to the NWMPP program manager.

Contact your Regional civil and criminal enforcement program managers to request a compliance screen. Regions and States are encouraged to consult with each other during this process. State-based actions against a facility carry the same weight as Federally actions.

Provide the enforcement office with the enrollment criteria discussed in this Handbook to assist them in making a recommendation for enrollment. In many cases, enforcement issues may be already resolved, or may be minor issues that can be resolved and, therefore, may not prevent enrollment in the NWMPP.

The turn around time for requesting and receiving a compliance screen may range from a few days up to a month, depending on the workload of the enforcement office and the complexity of information returned for a particular facility.

Examples of compliance screen results and decisions are included in Appendix 9 of this Handbook.

4. **Transmit results of the application review** to the HQ national program manager at OSWERO.SW.WMPartners@epamail.epa.gov with the following information:
 - a. Verification that the application was checked against the above criteria;
 - b. The date the compliance screen was completed;
 - c. Identify approval/denial of membership.

5. **Notify Facility of Membership Approval, and Present Membership Plaque**

HQ actions include:

- a. Enter enrollment information in its NWMPP database;
- b. Send emails acknowledging enrollment to the Applicant and Regional and State contacts;
- c. Order a membership plaque for the new member;
- d. Post the new member's enrollment agreement on the NWMPP website; and
- e. Forward the membership plaque to the primary Regional or State contact for presentation to the new member.

Regional or State actions include:

- a. Contac/inform the facility of its approval (or denial) for membership;
- b. Discusses when/where/how the plaque may be presented, and present Membership Plaque. For example, membership plaques could be presented at;
 - (1) The member's facility;
 - (2) A State function such as a Governor's Award ceremony,
 - (3) A Regional award ceremony, or
 - (4) A National awards ceremony (e.g., annual RCRA national conference)
- c. Determine if/how/when and which local media should be notified of the facility's enrollment.

III. Post Enrollment Activities

After enrollment, it is crucial to contact members on a periodic basis (e.g., quarterly or semi-annual phone calls) to monitor progress and provide assistance. Activities that must be completed are listed below.

- A. Track progress; encourage Partners to make changes to goals and schedules where necessary.
- B. Encourage Partners to document interim accomplishments.
- C. Answer questions about technical assistance, and assist in locating waste minimization technical assistance if requested.
- D. Answer questions about eligibility for Achievement Awards; and made arrangement for Award presentations.
- E. Withdrawal from program.

These activities are discussed further below.

- A. **Regions/States should determine that Partners are still on track**, or if revisions to goals or schedules are necessary. Stay abreast of who the project manager is—personnel changes at the facility could result in changes in priorities for the facility. Changes are voluntary, and revisions should be made by sending a revised Partnership Agreement found at <http://www.epa.gov/epaoswer/hazwaste/minimize/join.htm>. Examples are displayed in Exhibits 1 and 2 in the Appendix of this Handbook.

HQ will acknowledge receipt of revised Partnership Agreements and forward a copy to the Regional and State contacts for review.

The Regional or State contact should review revised Partnership Agreements for completeness and consistency with enrollment criteria; contact the Partner for clarification when necessary; advise the Partner that proposed changes have been accepted/denied; and forward a record of your acceptance/denial to the HQ program office at OSWEROSW.WMPartners@epamail.epa.gov.

The HQ program office will post revised revised Partnership Agreements on the NWMPP website.

- B. **Encourage Partners to document interim accomplishments.** For example, a partner may have completed installation of a source reduction or recycling technology and is in the process of testing performance. To report interim accomplishments, guide the partner to the Success Story outline found at <http://www.epa.gov/epaoswer/hazwaste/minimize/casestud.htm>. Examples of Success Stories are provided in Exhibits 5, 6, and 7 in the Appendix.

HQ will acknowledge receipt of interim Success Stories and forward a copy to the Regional and State contacts for review.

The Regional or State contact should review interim accomplishment reports for completeness and consistency with the Partner's enrollment agreement; contact the Partner for clarification when necessary; and ask the Partner to resubmit a revised report. Notify the national program manager at OSWEROSW.WMPartners@epamail.epa.gov when the interim accomplishment report is complete.

The HQ program office will acknowledge receipt of completed reports and post them on the NWMPP website.

- C. **Answer questions about technical assistance**, and assist in locating waste minimization technical assistance if requested. Some State and/or non-profit technical assistance programs provide links to experts; telephone consultations; and/or onsite assessments. Go to <http://www.epa.gov/epaoswer/hazwaste/minimize/techast.htm> if you need a starting point for finding technical assistance.
- D. **Answer questions about eligibility for Achievement Awards** and encourage members to submit completed Success Stories/Applications for an Achievement Award to the HQ program office.

Work with individual Partners to determine when their goal(s) will be achieved. When any goal has been reached, encourage the facility to complete a Success Story (use the Success Story outline; see Exhibits 5, 6, and 7 in the Appendix). A completed Success Story must be received to be eligible for an Achievement Award. If a facility committed to several WMPC reduction goals in its enrollment agreement, a Success Story may be completed and an Achievement Award may be presented for each goal that is achieved;

Guide the company to any of three options for completing a Success Story:

1. Complete the Success Story outline on-line at the Waste Minimization website at <http://www.epa.gov/epaoswer/hazwaste/minimize/achieve.htm>. A copy of this webpage is provided in Exhibit 1 in the Appendix of this handbook;
2. Download the Success Story outline [PDF, 21 kb] from EPA's website and send it to EPA via U.S. Mail or other delivery service; or

3. Request a program information package, and send the enclosed outline to EPA using U.S. Mail or other delivery service. An information package can be requested on-line in the “questions or comments” link on the website at <http://www.epa.gov/epaoswer/hazwaste/minimize/mail.htm>.

Shipping/mailing addresses are provided in Exhibit 10 in the Appendix of this Handbook.

HQ will acknowledge receipt of Success Stories/applications for Achievement awards and forward a copy to the Regional and State contacts for review.

The primary Regional or State contact should review completed Success Stories/applications for Achievement Award for completeness and consistency with the Partner’s Enrollment Agreement; and forward recommendation for approval/denial to the HQ program office at OSWEROSW.WMPartners@epamail.epa.gov.

The HQ program office will post approved Success Stories on the National Website; order an Achievement Award Plaque and forward it to the primary Regional or State contact.

The primary Regional or State contact should notify the facility of its approved Achievement Award; make arrangements for Award presentation with the facility, State and HQ; ask the facility if/how/when and which local media should be notified of their enrollment; and attend the award presentation. Award presentations could be made at (examples);

1. At the facility;
 2. A State function such as a Governor’s Award ceremony;
 3. A Regional award ceremony, or
 4. A National awards ceremony (e.g., annual RCRA national conference in Wash, D.C.).
- E. A partner may choose to withdraw from the program at any time. Ask the Partner to notify EPA at OSWEROSW.WMPartners@epamail.epa.gov, or send a letter to any of the addresses listed in Exhibit 10 in the Appendix of this Handbook.

If periodic contacts with a Partner reveal no progress is being made toward the goal committed to in the Partnership Agreement, advise your Regional and or State managers and contact the national program manager at OSWEROSW.WMPartners@epamail.epa.gov. It may become necessary to remove the Partner from the Program if no other option is available.

If a Partner’s compliance status changes during the course of the project, review the criteria discussed in Section I.D.3.c, above, and Exhibit 8 in the Appendix of this Handbook. Advise your Regional and or State managers and contact the national program manager at OSWEROSW.WMPartners@epamail.epa.gov. It may become necessary to remove the Partner from the Program if no other option is available.

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(source: NWMPP Website at <http://www.epa.gov/wastemin>)

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On-Line Enrollment for the National Waste Minimization Partnership Program

Ready to enroll? Great! You have three options: (1) You can use this on-line enrollment form to submit your application electronically; (2) You can [download the enrollment form](#) [PDF, 21 kb] and send it to us using [U.S. Mail](#) or other [delivery service](#); or (3) You can request a program information package by [contacting us](#). Fill out the form contained in the information package and send it to us. If you have any questions, you may wish to go back to our [membership information](#) page, or [contact us](#).

EPA's enrollment process is similar to other EPA [voluntary programs](#). After you submit your application, you should hear back from us within three weeks. If you don't hear back by then, feel free to [contact us](#)! Once you are enrolled, EPA will send you a Membership Plaque like the one pictured here, and we will post your [company's name and voluntary goals](#) on this website. At your request, we will also notify your local media that you have become a member of the [National Waste Minimization Partnership Program](#).

When you are ready, proceed with the application below.
The application asks for:

- Identifying information about your company;
- Your acknowledgement of the Partner Agreement;
- Identification of Waste Minimization Priority Chemicals you are targeting for reduction;
- Numerical reduction goals expressed in pounds of chemicals you expect to reduce;
- Expected timeline for achieving your goals (you may want to consider setting short term goals in lieu of, or in addition to, long term goals); and

- Identification of the source reduction and/or recycling methods you plan to use to reduce the generation of hazardous waste containing Waste Minimization Priority Chemicals.
- Identification of a company authorizing official for each goal. [Back to top](#)

Partner Agreement:

OMB No. 2050-0190
Expiration Date:
4/30/2006

Our organization/company is choosing to become a partner in EPA's National Waste Minimization Partnership Program. Our goal is to reduce the quantity of one or more [Waste Minimization Priority Chemicals](#) currently found in our [hazardous and/or nonhazardous wastes](#) using [source reduction and/or recycling practices](#), in lieu of waste treatment or land disposal practices. In this enrollment application, we identify one or more voluntary waste minimization goals that we believe we can achieve as Partners in this Program.

The voluntary goals provided below are initial estimates, and may change over time. **We may revise our goals or withdraw from the program at any time.** If/when choose to revise our goals or withdraw from the program, we will notify EPA.

Company Information

Company Name:	<input type="text"/>	Facility Name:	<input type="text"/>
Principal Contact:	<input type="text"/>	Title:	<input type="text"/>
Address Line1:	<input type="text"/>	Address Line 2:	<input type="text"/>
City:	<input type="text"/>	State:	<input type="text"/>
Zip:	<input type="text"/>		
Phone:	<input type="text"/>	Fax:	<input type="text"/>
E-mail:	<input type="text"/>	EPA RCRA ID Number:	<input type="text"/>

Waste Minimization Goals

Instructions: Choose one or more [hazardous and/or nonhazardous wastes](#) generated by your facility that contain one or more [Waste Minimization Priority Chemicals \(WMPCs\)](#). For each waste you identify, establish a waste minimization [\(source reduction and/or recycling\)](#) goal and a timeline for achieving that goal. You may propose projects that reduce wastes that do not contain WMPCs, but will nevertheless result in a significant environmental improvement. EPA encourages organizations to undertake waste minimization projects that benefit the environment. However, the purpose of the National Waste Minimization Partnership Program is to reduce the generation of WMPCs in wastes because WMPCs can cause the most serious problems if released to the environment.

Downloaded from <https://www.cambridge.org/core>. University of Cambridge, on 01 Jun 2018 at 11:07:00, subject to the Cambridge Core terms of use, available at <https://www.cambridge.org/core/terms>. <https://doi.org/10.1017/9781315326477.007>

If you choose to propose a project that will result in a significant environmental result, but does not reduce a waste that contains a WMPC, select "other" in the chemical selection drop down menus below.

Goal #1: The WMPC selected for this goal is:

Choose "other" if the chemical is not a Waste Minimization Priority Chemical. Provide the chemical or waste name and CASRN in the boxes below.

--	--

--	--



11/11/2019

11

(pounds of chemical generated
in hazardous waste per year)

Timeline for this project: We will accomplish this **source reduction** goal between

and
(month/year) (month/year)

To accomplish this goal, we will explore the following **source reduction** options (check all that apply):

- ☐ Equipment or technology modifications
- ☐ Reformulation or redesign of products
- ☐ Improvements in inventory control
- ☐ Process or procedure modifications
- ☐ Substitution of less toxic raw materials
- ☐ Improvements in maintenance/ housekeeping practices
- ☐ Other (please explain below, limit 200 characters):



Recycling Information for this Chemical/Waste: In addition to, or in lieu of, using source reduction methods, our **voluntary recycling** goal for this chemical is to increase the recycled quantity of this chemical from:

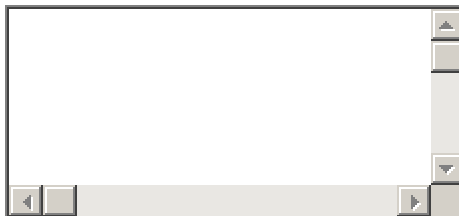
to
(pounds per year) (pounds per year)

Timeline for this project: We will accomplish this **recycling** goal between

and
(month/year) (month/year)

To accomplish this **recycling** goal, we will explore (check all that apply):

- ☐ Direct use/reuse in a process to make a product
- ☐ Processing waste to recover or regenerate a usable product
- ☐ Using/reusing waste as a substitute for a commercial product
- ☐ Other (please explain below):



Authorizing Official for this goal:

Name: Title: Date:

If you would like to propose additional goals for this chemical, or goals for additional chemicals (optional, not required for enrollment), skip the "Submit Goals Now" button, and go on to the next section. Otherwise, submit your application now by clicking once on the "Submit Goals Now" button.

[#1 Back to top of Enrollment Form](#)

Submit Goals Now!

Goal #2: The WMPC selected for this goal is:


1,2,4-Trichlorobenzene CASRN 120-82-1

Choose "other" if the chemical is not a Waste Minimization Priority Chemical. Provide the chemical or waste name and CASRN in the boxes below.

Other - Chemical Name:

Other - CASRN:	
----------------	--

Please provide a brief detailed description of the proposed project and the mechanism you will use to measure success (*limit 250 characters*):



Source Reduction Information for this Chemical/Waste: Our voluntary **source reduction** goal is to reduce the amount of this chemical generated in hazardous waste from a baseline of:

to a reduced amount of

(pounds of
chemical
generated in
hazardous waste
per year)

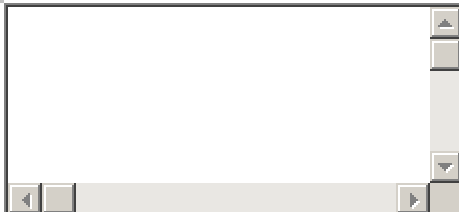
(pounds of chemical generated
in hazardous waste per year)

Timeline for this project: We will accomplish this **source reduction** goal between

and
(month/year) (month/year)

To accomplish this goal, we will explore the following **source reduction** options (*check all that apply*):

- ☐ Equipment or technology modifications
- ☐ Reformulation or redesign of products
- ☐ Improvements in inventory control
- ☐ Process or procedure modifications
- ☐ Substitution of less toxic raw materials
- ☐ Improvements in maintenance/ housekeeping practices
- ☐ Other (please explain below, limit 200 characters):



Recycling Information for this Chemical/Waste: In addition to, or in lieu of, using source reduction methods, our **voluntary recycling** goal for this chemical is to increase the recycled quantity of this chemical from:

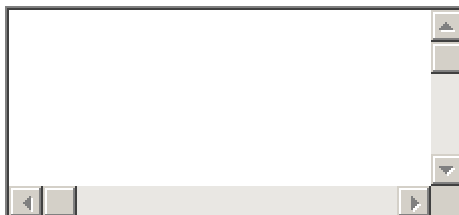
to
(pounds per year) (pounds per year)

Timeline for this project: We will accomplish this **recycling** goal between

and
(month/year) (month/year)

To accomplish this **recycling** goal, we will explore (check all that apply):

- ☐ Direct use/reuse in a process to make a product
- ☐ Processing waste to recover or regenerate a usable product
- ☐ Using/reusing waste as a substitute for a commercial product
- ☐ Other (please explain below):



Authorizing Official for this goal:

Name: Title: Date:

If you would like to propose additional goals for this chemical, or goals for additional chemicals (optional, not required for enrollment), skip the "Submit

Goals Now" button, and go on to the next section. Otherwise, submit your application now by clicking once on the "Submit Goals Now" button.

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[#2](#)

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Submit Goals Now!

Goal #3: The WMPC selected for this goal is:

1,2,4-Trichlorobenzene CASRN 120-82-1

Choose "other" if the chemical is not a Waste Minimization Priority Chemical. Provide the chemical or waste name and CASRN in the boxes below.

Other - Chemical Name:

Other - CASRN:

Please provide a brief detailed description of the proposed project and the mechanism you will use to measure success (*limit 250 characters*):

Source Reduction Information for this Chemical/Waste: Our voluntary **source reduction** goal is to reduce the amount of this chemical generated in hazardous waste from a baseline of:

to a reduced amount of

(pounds of chemical generated in hazardous waste per year)

(pounds of chemical generated in hazardous waste per year)

Timeline for this project: We will accomplish this **source reduction** goal between

and

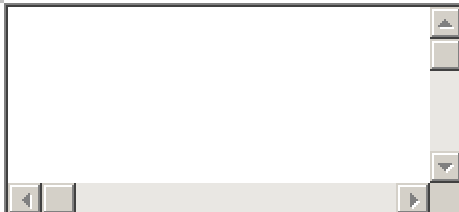
(month/year)

(month/year)

To accomplish this goal, we will explore the following **source reduction** options (*check all that apply*):

- ☐ Equipment or technology modifications
- ☐ Reformulation or redesign of products
- ☐ Improvements in inventory control
- ☐ Process or procedure modifications

- ☐ Substitution of less toxic raw materials
- ☐ Improvements in maintenance/ housekeeping practices
- ☐ Other (please explain below, limit 200 characters):



Recycling Information for this Chemical/Waste: In addition to, or in lieu of, using source reduction methods, our **voluntary recycling** goal for this chemical is to increase the recycled quantity of this chemical from:

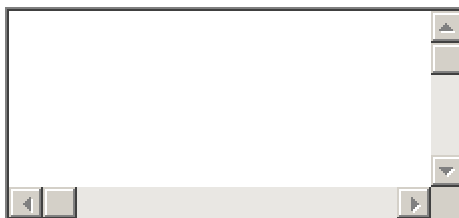
to
(pounds per year) (pounds per year)

Timeline for this project: We will accomplish this **recycling** goal between

and
(month/year) (month/year)

To accomplish this **recycling** goal, we will explore (check all that apply):

- ☐ Direct use/reuse in a process to make a product
- ☐ Processing waste to recover or regenerate a usable product
- ☐ Using/reusing waste as a substitute for a commercial product
- ☐ Other (please explain below):



Authorizing Official for this goal:

Name: Title: Date:

If you would like to propose additional goals for this chemical, or goals for additional chemicals (optional, not required for enrollment), skip the "Submit Goals Now" button, and go on to the next section. Otherwise, submit your application now by clicking once on the "Submit Goals Now" button.

[#3](#)

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[Back to Beginning of Goal](#)

Goal #4: The WMPC selected for this goal is:

1,2,4-Trichlorobenzene CASRN 120-82-1

Choose "other" if the chemical is not a Waste Minimization Priority Chemical.
Provide the chemical or waste name and CASRN in the boxes below.

Other - Chemical Name:

Other - CASRN:

Please provide a brief detailed description of the proposed project and the mechanism you will use to measure success (*limit 250 characters*):

Source Reduction Information for this Chemical/Waste: Our voluntary **source reduction** goal is to reduce the amount of this chemical generated in hazardous waste from a baseline of:

to a reduced amount
of

(pounds of
chemical
generated in
hazardous waste
per year)

(pounds of chemical generated
in hazardous waste per year)

Timeline for this project: We will accomplish this **source reduction** goal between

and

(month/year)

(month/year)

To accomplish this goal, we will explore the following **source reduction** options
(*check all that apply*):

- ☐ Equipment or technology modifications
- ☐ Reformulation or redesign of products
- ☐ Improvements in inventory control
- ☐ Process or procedure modifications
- ☐ Substitution of less toxic raw materials
- ☐ Improvements in maintenance/ housekeeping practices
- ☐ Other (*please explain below, limit 200 characters*):

Recycling Information for this Chemical/Waste: In addition to, or in lieu of, using source reduction methods, our **voluntary recycling** goal for this chemical is to increase the recycled quantity of this chemical from:

to
(pounds per year) (pounds per year)

Timeline for this project: We will accomplish this **recycling** goal between

and
(month/year) (month/year)

To accomplish this **recycling** goal, we will explore (*check all that apply*):

- ☐ Direct use/reuse in a process to make a product
- ☐ Processing waste to recover or regenerate a usable product
- ☐ Using/reusing waste as a substitute for a commercial product
- ☐ Other (*please explain below*):

Authorizing Official for this goal:

Name: Title: Date:

If you would like to propose additional goals for this chemical, or goals for additional chemicals (optional, not required for enrollment), skip the "Submit Goals Now" button, and go on to the next section. Otherwise, submit your application now by clicking once on the "Submit Goals Now" button. [Back to Beginning of Goal](#)

[#4](#)

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Goal #5: The WMPC selected for this goal is:

Choose "other" if the chemical is not a Waste Minimization Priority Chemical.

Provide the chemical or waste name and CASRN in the boxes below.

Other - Chemical Name:

Other - CASRN:

Please provide a brief detailed description of the proposed project and the mechanism you will use to measure success (*limit 250 characters*):

Source Reduction Information for this Chemical/Waste: Our voluntary **source reduction** goal is to reduce the amount of this chemical generated in hazardous waste from a baseline of:

to a reduced amount
of

(pounds of
chemical
generated in
hazardous waste
per year)

(pounds of chemical generated
in hazardous waste per year)

Timeline for this project: We will accomplish this **source reduction** goal between

and

(month/year)

(month/year)

To accomplish this goal, we will explore the following **source reduction** options (*check all that apply*):

- ☐ Equipment or technology modifications
- ☐ Reformulation or redesign of products
- ☐ Improvements in inventory control
- ☐ Process or procedure modifications
- ☐ Substitution of less toxic raw materials
- ☐ Improvements in maintenance/ housekeeping practices
- ☐ Other (*please explain below, limit 200 characters*):

Recycling Information for this Chemical/Waste: In addition to, or in lieu of, using source reduction methods, our **voluntary recycling** goal for this chemical is to increase the recycled quantity of this chemical from:

to
(pounds per year) (pounds per year)

Timeline for this project: We will accomplish this **recycling** goal between

and
(month/year) (month/year)

To accomplish this **recycling** goal, we will explore (*check all that apply*):

- ☐ Direct use/reuse in a process to make a product
- ☐ Processing waste to recover or regenerate a usable product
- ☐ Using/reusing waste as a substitute for a commercial product
- ☐ Other (*please explain below*):

Authorizing Official for this goal:

Name: Title: Date:

If you would like to propose additional goals for this chemical, or goals for additional chemicals (optional, not required for enrollment), skip the "Submit Goals Now" button, and go on to the next section. Otherwise, submit your application now by clicking once on the "Submit Goals Now" button. [Back to Beginning of Goal](#)


[#5](#) [Back to top of Enrollment Form](#)

US Mail:

U. S. EPA
Waste Minimization Partnership Coordinator
Waste Minimization Branch, 5302W
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Delivery Service:

U. S. EPA
Waste Minimization Partnership Coordinator
Waste Minimization Branch, 6th floor
2800 Crystal Drive



Arlington, VA 22202

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Exhibit 2: Hard Copy Enrollment Form (source: <http://www.epa.gov/wastemin>)

Enrollment Form

SAMPLE

OMB Control Number: 2050-0190
Expiration Date: 4/30/2006



ENROLL US!

General Information

Organization Name: ABC Manufacturing Facility Name: Detroit, MI
Principal Contact: Bob Schroeder Title: Environmental Specialist
Address: 2525 Hollywood Lane
City: Detroit State: MI Zip: 33015
Phone Number: 555-333-6644 Fax: 555-333-6655 E-mail: bschroeder@abcmmanufacturing.com
EPA RCRA ID Number: XYD 910 848 737

Goals Development

Our organization is choosing to become a partner in EPA's National Waste Minimization Partnership Program. Our goal is to reduce the quantity of one or more waste minimization priority chemicals currently found in our hazardous and/or nonhazardous wastes using source reduction and/or recycling practices, in lieu of waste treatment or land disposal practices. In this enrollment application, we identify one or more voluntary waste minimization goals that we believe we can achieve as partners in this program. The voluntary goals provided below are initial estimates, and may change over time. We may revise our goals or withdraw from the program at any time. If/when choose to revise our goals or withdraw from the program, we will notify EPA.

Chemical #1: Lead CASRN: 7439-92-1

Narrative description of proposed project and the mechanism you will use to measure success (attach additional sheets if needed): Investigate opportunities to eliminate lead from our solder process. Previously, we replaced 50 percent lead solder with a low-lead solder which contained less than 1 percent lead.

1. Our voluntary source reduction goal for chemical #1 is to reduce the amount of this chemical generated in hazardous waste from a baseline of 2,000 lbs in May 2003, to a reduced amount of 0 pounds,
by Dec 2003.
(month/year) (X lbs generated/year) (month/year) (X lbs generated/year)

2. To accomplish this goal, we will explore the following source reduction options: (Check all that apply)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Equipment or technology modifications | <input checked="" type="checkbox"/> Process or procedure modifications |
| <input type="checkbox"/> Reformulation or redesign of products | <input type="checkbox"/> Substitution of less toxic raw materials |
| <input type="checkbox"/> Improvements in inventory control | <input type="checkbox"/> Improvements in maintenance/housekeeping practices |
| <input type="checkbox"/> Other (explain): _____ | |

AND/OR

3. Our voluntary recycling goal for chemical #1 is to increase the amount of waste chemical #1 recycled from a baseline amount of _____ to _____, in _____, to an increased recycled quantity of _____ by _____,
(X lbs/year) (X lbs/year) (month/year) (X lbs/year) (month/year)

4. To accomplish this recycling goal, we will: (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Direct use/reuse in a process to make a product | <input type="checkbox"/> Process the waste to recover or regenerate a usable product |
| <input type="checkbox"/> Use/reuse as a substitute for a commercial product | <input type="checkbox"/> Other (explain): _____ |

Note to participants: Please sign your commitment on the reverse side of this sheet.

Use supplemental sheets to set goals for additional chemicals.

(Copy and complete for as many chemicals as you wish)

Organization Name: ABC Manufacturing

Principal Contact: Bob Schroeder Phone Number: 555-333-6644

Narrative description of proposed project and the mechanism you will use to measure success: Send used Ni-Cad

2. To accomplish this goal, we will explore the following source reduction options: (Check all that apply)

- ☐ Equipment or technology modifications ☐ Process or procedure modifications
☐ Reformulation or redesign of products ☐ Substitution of less toxic raw materials
☐ Improvements in inventory control ☐ Improvements in maintenance/housekeeping practices
☐ Other (explain): _____

3. One of the goals for Chemical # 2 is to increase the pounds of this chemical recycled from a baseline

- nature

Signature of Company Official: _____ Date: 5/1/03



Exhibit 3: Example of Electronic Enrollment Application Received as an Email

When an applicant submits an Online Enrollment application, the format changes from the html format displayed in Exhibit 1 above, to a text email that contains the applicant's application data in a line-by-line format. The example below displays the email text format of an electronic application received from an applicant. Exhibit 4, below, displays the same email data contained in Exhibit 3, but has been reformatted using the tab key for easier reading.

The fields shown below appear in the same order as they appear on the online application. Items beginning with "A_" cover general facility information. Items beginning with "B_ through F_" are the goal sections.

Internet Daemon Owner
daemon@mountain.epa.gov>

06/05/2003 12:23 PM

To:
OSWERO SW.WMPartners@epamail.epa.gov
cc:

A00_Submit Goals: Submit Goals Now!
A01_company_name: ABC Manufacturing
A02_facility_name: Detroit, MI
A03_contact_name: Bob Shroeder
A04_contact_title: Environmental Specialist
A05_street_address_line1: 2525 Hollywood Land
A06_address_line2:
A07_city: Detroit
A08_state: MI
A09_zip_code: 33015
A10_contact_phone: 555-333-6644
A11_contact_fax: 555-333-6655
A12_contact_email: bschroeder@abcmanufacturing.com
A13_Facility_RCRA_ID: XYD 910 848 737
B01_Goal1_WMPC_name: 7439-92-1
B02_Goal1_Other_chemical_name:
B03_Goal1_other_chemical_casrn:
B04_Goal1_Project_description: Investigate opportunities to eliminate lead from other solder processes. Previously, we replaced 50 lead solder with a low-lead solder which contained less than 1 percent lead.
B05_Goal1_Source_Reduction_start_lbs: 2000
B06_Goal1_Source_Reduction_final_lbs: 0
B07_Goal1_Source_Reduction_start_date: 5/2003
B08_Goal1_Source_Reduction_end_date: 12/2003

Exhibit 3: Example of Electronic Enrollment Application (cont'd)

B09_Goal1_S/R_method_equipment_mods:on
B12_Goal1_S/R_method_process_mods:on
B16_Goal1_other_S/R_method_description:
B17_Goal1_Recyc_start_lbs:
B18_Goal1_Recyc_end_lbs:
B19_Goal1_Recyc_start_date:
B20_Goal1_Recyc_end_date:
B25_Goal1_Recyc_method_explanation_of_other_method:
B26_Goal1_authorizing_official_name:
B27_Goal1_authorizing_official_title:
B28_Goal1_authorization_date:
C01_Goal2_WMPC_name:120-82-1
C02_Goal2_Other_chemical_name2:Nickel-Cadmium Compounds
C03_Goal2_other_chemical_casrn2:N/A
C04_Goal2_Project_description:Send used Ni-Cad batteries from cordless power tools to recycling facilities rather than dispose of them as hazardous waste. Find a vendor to recycle these batteries.
C05_Goal2_Source_Reduction_start_lbs2:
C06_Goal2_Source_Reduction_final_lbs2:
C07_Goal2_Source_Reduction_start_date:
C08_Goal2_Source_Reduction_end_date:
C16_Goal2_S/R_other_method_description:
C17_Goal2_Recyc_start_lbs:0
C18_Goal2_Recyc_end_lbs2:2000
C19_Goal2_Recyc_start_date:5/03
C20_Goal2_Recyc_end_date:12/03
C23_Goal2_Recyc_method_use/reuse_for_commercial_product2:on
C24_Goal2_Recyc_method_other2:on
C25_Goal2_Recyc_description_of_other_method_: Send used Ni-Cad batteries from cordless power tools to recycling facilities.
C26_Goal2_authorizing_official_name:Fred Kirby
C27_Goal2_authorizing_official_title:President
C28_Goal2_authorization_date:5/1/03
D01_Goal3_WMPC_name:120-82-1
D02_Goal3_Other_chemical_name3:
D03_Goal3_other_chemical_casrn:
D04_Goal3_Project_description:
D05_Goal3_Source_Reduction_start_lbs:
D06_Goal3_Source_Reduction_final_lbs:
D07_Goal3_Source_Reduction_start_date:
D08_Goal3_Source_Reduction_end_date:
D16_Goal3_S/R_other_method_description:

Exhibit 3: Example of Electronic Enrollment Application (cont'd)

D17_Goal3_Recyc_start_lbs:
D18_Goal3_Recyc_end_lbs:
D19_Goal3_Recyc_start_date:
D20_Goal3_Recyc_end_date:
D25_Goal3_Recyc_description_of_other_method:
D26_Goal3_authorizing_official_name:
D27_Goal3_authorizing_official_title:
D28_Goal3_authorization_date:
E01_Goal4_WMPC_name:120-82-1
E02_Goal4_Other_chemical_name:
E03_Goal4_other_chemical_casrn:
E04_Goal4_Project_description:
E05_Goal4_Source_Reduction_start_lbs:
E06_Goal4_Source_Reduction_final_lbs:
E07_Goal4_Source_Reduction_start_date:
E08_Goal4_Source_Reduction_end_date:
E16_Goal4_S/R_method_description_of_other_method:
E17_Goal4_Recyc_start_lbs:
E18_Goal4_Recyc_end_lbs:
E19_Goal4_Recyc_start_date:
E20_Goal4_Recyc_end_date:
E25_Goal4_Recycl_description_of_other_method:
E26_Goal4_authorizing_official_name:
E27_Goal4_authorizing_official_title:
E28_Goal4_authorization_date:
F01_Goal5_WMPC_name:120-82-1
F02_Goal5_Other_chemical_name:
F03_Goal5_other_chemical_casrn:
F04_Goal5_Project_description:
F05_Goal5_Source_Reduction_start_lbs:
F06_Goal5_Source_Reduction_final_lbs:
F07_Goal5_Source_Reduction_start_date:
F08_Goal5_Source_Reduction_end_date:
F16_Goal5_S/R_other_method_description:
F17_Goal5_Recyc_start_lbs:
F18_Goal5_Recyc_end_lbs:
F19_Goal5_Recyc_start_date:
F20_Goal5_Recyc_end_date:
F25_Goal5_Recyc_description_of_other_method:
F26_Goal5_authorizing_official_name:
F27_Goal5_authorizing_official_title:
F28_Goal5_authorization_date:

Exhibit 4: Sample Email Enrollment Application, Reformatted Using the Tab Key

A00_	Submit	Goals:Submit Goals Now!	
A01_	company_name:		ABC Manufacturing
A02_	facility_name:		Detroit, MI
A03_	contact_name:		Bob Shroeder
A04_	contact_title:		Environmental Specialist
A05_	street_address_line1:		2525 Hollywood Land
A06_	address_line2:		
A07_	city:		Detroit
A08_	state:		MI
A09_	zip_code:		33015
A10_	contact_phone:		555-333-6644
A11_	contact_fax:		555-333-6655
A12_	contact_email:		bschroeder@abcmanufacturing.com
A13_	Facility_RCRA_ID:		XYD 910 848 737
B01_	Goal1_WMPC_name:		7439-92-1
B02_	Goal1_Other_chemical_name:		
B03_	Goal1_other_chemical_casrn:		
B04_	Goal1_Project_description:		Investigate opportunities to eliminate lead from other solder processes. Previously, we replaced 50 lead solder with a low-lead solder which contained less than 1 percent lead.
B05_	Goal1_Source_Reduction_start_lbs:		2000
B06_	Goal1_Source_Reduction_final_lbs:		0
B07_	Goal1_Source_Reduction_start_date:		5/2003
B08_	Goal1_Source_Reduction_end_date:		12/2003
B09_	Goal1_S/R method_equipment_mods:		on
B12_	Goal1_S/R method_process_mods:		on
B16_	Goal1_other_S/R method_description:		
B17_	Goal1_Recyc_start_lbs:		
B18_	Goal1_Recyc_end_lbs:		
B19_	Goal1_Recyc_start_date:		
B20_	Goal1_Recyc_end_date:		
B25_	Goal1_Recyc_method_explanation_of_other_method:		
B26_	Goal1_authorizing_official_name:		
B27_	Goal1_authorizing_official_title:		
B28_	Goal1_authorization_date:		
C01_	Goal2_WMPC_name:		
C02_	Goal2_Other_chemical_name2:		Nickel-Cadmium Compounds

Exhibit 4: Sample Email Enrollment Application, Reformatted (cont'd)

C03_	Goal2_other_chemical_casrn2:	N/A
C04_	Goal2_Project_description:	Send used Ni-Cad batteries from cordless power tools to recycling facilities rather than dispose of them as hazardous waste. Find a vendor to recycle these batteries.
C05_	Goal2_Source_Reduction_start_lbs2:	
C06_	Goal2_Source_Reduction_final_lbs2:	
C07_	Goal2_Source_Reduction_start_date:	
C08_	Goal2_Source_Reduction_end_date:	
C16_	Goal2_S/R_other_method_description:	
C17_	Goal2_Recyc_start_lbs:	0
C18_	Goal2_Recyc_end_lbs2:	2000
C19_	Goal2_Recyc_start_date:	5/03
C20_	Goal2_Recyc_end_date:	12/03
C23_	Goal2_Recyc_method_use/reuse_for_commercial_product2:	on
C24_	Goal2_Recyc_method_other2:	on
C25_	Goal2_Recyc_description_of_other_method_:	Send used Ni-Cad batteries from cordless power tools to recycling facilities.
C26_	Goal2_authorizing_official_name:	Fred Kirby
C27_	Goal2_authorizing_official_title:	President
C28_	Goal2_authorization_date:	5/1/03
D01_	Goal3_WMPC_name:	
D02_	Goal3_Other_chemical_name3:	
D03_	Goal3_other_chemical_casrn:	
D04_	Goal3_Project_description:	
D05_	Goal3_Source_Reduction_start_lbs:	
D06_	Goal3_Source_Reduction_final_lbs:	
D07_	Goal3_Source_Reduction_start_date:	
D08_	Goal3_Source_Reduction_end_date:	
D16_	Goal3_S/R_other_method_description:	
D17_	Goal3_Recyc_start_lbs:	
D18_	Goal3_Recyc_end_lbs:	
D19_	Goal3_Recyc_start_date:	
D20_	Goal3_Recyc_end_date:	
D25_	Goal3_Recyc_desription_of-other_method:	
D26_	Goal3_authorizing_official_name:	
D27_	Goal3_authorizing_official_title:	
D28_	Goal3_authorization_date:	

Exhibit 4: Sample Email Enrollment Application, Reformatted (cont'd)

E01_ Goal4_WMPC_name:120-82-1
E02_ Goal4_Other_chemical_name:
E03_ Goal4_other_chemical_casrn:
E04_ Goal4_Project_description:
E05_ Goal4_Source_Reduction_start_lbs:
E06_ Goal4_Source_Reduction_final_lbs:
E07_ Goal4_Source_Reduction_start_date:
E08_ Goal4_Source_Reduction_end_date:
E16_ Goal4_S/R_method_description_of_other_method:
E17_ Goal4_Recyc_start_lbs:
E18_ Goal4_Recyc_end_lbs:
E19_ Goal4_Recyc_start_date:
E20_ Goal4_Recyc_end_date:
E25_ Goal4_Recycl_description_of_other_method:
E26_ Goal4_authorizing_official_name:
E27_ Goal4_authorizing_official_title:
E28_ Goal4_authorization_date:

F01_ Goal5_WMPC_name:
F02_ Goal5_Other_chemical_name:
F03_ Goal5_other_chemical_casrn:
F04_ Goal5_Project_description:
F05_ Goal5_Source_Reduction_start_lbs:
F06_ Goal5_Source_Reduction_final_lbs:
F07_ Goal5_Source_Reduction_start_date:
F08_ Goal5_Source_Reduction_end_date:
F16_ Goal5_S/R_other_method_description:
F17_ Goal5_Recyc_start_lbs:
F18_ Goal5_Recyc_end_lbs:
F19_ Goal5_Recyc_start_date:
F20_ Goal5_Recyc_end_date:
F25_ Goal5_Recyc_description_of_other_method:
F26_ Goal5_authorizing_official_name:
F27_ Goal5_authorizing_official_title:
F28_ Goal5_authorization_date:

Exhibit 5: On-Line Success Story Information

(source: NWMPP Website at <http://www.epa.gov/wastemin>)

Ready to Apply for an Achievement Award?

OR Share a Success Story?

If you have achieved one of the goals identified in your enrollment agreement, you are eligible for an Achievement Award. To receive this Award, describe your achievement using the Success Story outline provided below. Your completed Success Story serves as your application for an Achievement Award. Your completed Success Story will be posted on EPA's Waste Minimization Website. At your request, EPA will also notify your local media of your achievement and award.



If you are not ready to apply for an Achievement Award at this time, but you have made important progress toward your goal(s) and you would like to share information about your progress, you may submit a Success Story to post on the EPA's Waste Minimization Website.

You have several options for completing a Success Story:

1. You can use our on-line application process at <http://www.epa.gov/epaoswer/hazwaste/minimize/achieve.htm>;
2. You can download the Success Story outline [PDF, 21 kb] at <http://www.epa.gov/epaoswer/hazwaste/minimize/achieve.htm>, and send it to us via U.S. Mail or other delivery service (addresses provided below); or
3. You can request a program information package on-line at <http://www.epa.gov/epaoswer/hazwaste/minimize/mail.htm>, or by emailing us at OSWEROSW.WMPartners@epa.gov

EPA will review your Success Story for completeness, send you an Achievement Award like the one shown here, and post your Achievement on our website. At your request, we will also notify your local media of your Achievement and Award.

The Success Story outline provided below offers a framework for making your Success Story clear and understandable to the many readers that visit EPA's National Waste Minimization Program website at <http://www.epa.gov/wastemin>.



Exhibit 5: On-Line Success Story Information (cont'd)

The outline makes recommendations for approximate length; however, you can make your Success Story as detailed as you wish. A sample Success Story is also provided as a guide. The outline suggests including:

- < Identifying information about your company;
- < A description of what your company produces;
- < The Partnership Goal your company set when you enrolled in the program;
- < A description of the source reduction and/or recycling alternatives you explored;
- < A discussion of any hurdles you faced;
- < A description of your Waste Minimization results; and
- < A summary of lessons learned that your company would like to share with others.

Exhibit 6: Waste Minimization Partnership Success Story Outline
(source: NWMPP Website at <http://www.epa.gov/wastemin>)

Identifying Information (as identified in your Enrollment Agreement):

Organization Name: _____

Facility Location: _____

Contact Name: _____ Contact Phone: _____

Enrollment Date: _____ Today's Date: _____

Check one of the following options:

_____ We have achieved one of the goals identified in our enrollment form, and would like to apply for an Achievement Award.

_____ We are not applying for an Achievement Award at this time. However, we have made important progress and would like to submit a Success Story to post on the Waste Minimization Website.

1. Company Background (about 100 words):

- < How large is your company?
- < How long has your organization been in operation?
- < What do you produce, and what is the product used for?
- < Who are your major customers?
- < How do you produce this product?
- < How much do you produce in a year?

2. What Partnership Program Goal Did You Set and How Did You Achieve It? (about 250 words):

- < What chemical(s) did you choose to work on?
- < What source reduction and/or recycling goal(s) did you set for this waste?
- < Why did you pick this waste(s) to work on?

Exhibit 6: Waste Minimization Partnership Success Story Outline (cont'd)

4.What Source Reduction and/or Recycling Alternatives Did You Explore? (about 250 words)

- < Source Reduction methods:
 - Equipment or technology modifications;
 - Material substitution;
 - Reformulation or redesign of products;
 - Equipment changes;
 - Improvements in inventory control;
 - Process or procedure modifications;
 - Substitution of less toxic raw materials;
 - Improvements in maintenance/ housekeeping practices; and/or
 - Other (please explain).

- < Recycling methods:
 - Direct use/reuse in a process to make a product;
 - Process the waste to recover or regenerate a usable product;
 - Use/reuse waste as a substitute for a commercial product; and/or
 - Other (please explain).

- < What method did you finally use to achieve your goal?

4. What hurdles did you face? (about 150 words)

- | | |
|---------------------------------|--|
| < Material substitution issues; | < Senior management commitment and support issues; |
| < Product quality issues; | < Training and/or departmental coordination issues; |
| < Process change issues; | < What prior successes helped you achieve this goal? |
| < Equipment issue; | |
| < Financial issues; | |
| < Customer issues; | |

Exhibit 6: Waste Minimization Partnership Success Story Outline (cont'd)

5. Waste Minimization Results (about 250 words):

- < Describe and quantify any changes in waste generation achieved using source reduction and/or recycling methods;
- < Describe cost savings and/or increases, including changes in capital, production, O&M, raw material purchases, waste management, and worker health and safety costs;
- < What was the payback period for this project?
- < Describe any changes in company policy, management and/or worker involvement in waste minimization achievements, and/or customer satisfaction that resulted directly or indirectly from this achievement.

6. Lessons Learned (about 100 words):

- < What lessons learned from this project would you like to share with others?

Exhibit 7: Example Success Story

(source: NWMPP Website at <http://www.epa.gov/wastemin>)

Acme MicroGlass Company: The Acme MicroGlass Company (AMG) was founded in 1991, in Wayright, Pennsylvania. AMG grew from 20 employees in 1991, to 500 employees in 2003. AMG manufactures specialized production monitoring equipment that can be used in a variety of commercial and manufacturing processes to evaluate efficiency and error rates. MicroGlass units are manufactured using a proprietary process that incorporates electronic computer chip production technologies with state_of_the_art cathode ray tube and software management technologies. AMG's major customers include medical equipment manufacturers, aeronautics engineering companies and computer manufacturers. AMG reported revenues of more than \$440 million in 2002.

AMG's Partnership Program Goal: In order to maintain market share in a highly competitive electronics industry, AMG management directed its engineering and production departments to explore cost reduction options. One of the cost areas explored was waste management. In 2001, AMG generated 200 tons of spent solvent and metal bearing hazardous wastes that cost \$800,000 to manage and dispose of properly. One of the metals in the waste was lead, which is widely known to be a public health concerns because of its toxicity to humans if ingested or inhaled. Prior to enrolling in EPA's National Waste Minimization Partnership Program, AMG identified a goal of reducing lead in production by 50 percent, as a means of cutting production costs, and began working on technical alternatives in 2001. AMG enrolled in EPA's National Waste Minimization Partnership Program in June 2002.

Alternatives Considered: AMG used a "lean manufacturing" approach, Kaizen, to structure a plan for improving production efficiency and environmental performance. AMG considered a variety of raw material substitutes that would either reduce or eliminate lead in its production processes. AMG had to ensure that product performance remained extremely high considering the specialized applications its customers depend on. After exploring many alternatives, AMG finally adopted ceramic and beryllium_based substitutes for two of its three lead uses in production. AMG also installed dual electrostatic precipitators on its remaining process that used lead in the application, and increased recovery of lead by 75 percent. AMG installed several O&M improvements, including recovery sumps in floor drains and improved efficiency product rinsing techniques that reduced the generation of non_lead wastes. AMG had used a similar team approach to reduce error rates in 1995 and to reduce production down time in 1999.

Exhibit 7: Example Success Story (cont'd)

Hurdles Faced: Coordinating efforts between departments was difficult at first because some managers were wary of potential risks of changing product quality—one of the main concerns of the company. Others were concerned about making production changes that would create downtime and interfere with production quotas and delivery dates. As the alternatives were developed and tested, manager's and workers' concerns were addressed. Downtime was minimized and product quality was demonstrated to be equal to or better than existing quality.

Waste Minimization Results: AMG reduced its lead usage by about 1,800 pounds per year. Waste generation decreased by 50 percent in the first year. The research and capital costs to make this change totaled over \$1.5 million over a year and a half time frame. In addition, purchasing specialized raw materials increased raw material purchase costs by 8 percent. At the same time, waste management costs, worker health and safety training costs, and O&M costs decreased by \$250,000 in the first year. Net savings in the first year of operation was \$200,000 yielding a payback period of 7.5 years. While the payback period is less than optimal, AMG management considers this investment a worthwhile one because it provides AMG a technological advantage that the company can build on, the process identified other production opportunities that could yield additional savings, and because AMG's membership in EPA's National Waste Minimization Partnership Program provides advantageous public recognition with its customers.

Lessons Learned: Developing a coordinated plan that has top management support is crucial to achieving a desired outcome. Talking to line workers as well as managers provides important information about how to make transitions smoother.

Exhibit 8: Guidance for Compliance Screening

These criteria are consistent with the EPA's comprehensive screening guidance: "Compliance Screening for EPA Partnership Programs" (see <http://www.epa.gov/partners/resource/ppsguide.pdf>). The compliance screen checks for corporate-wide compliance with all Federal environmental laws, including those administered by EPA and by other Federal agencies (e.g. Endangered Species Act, administered by Fish and Wildlife Service). In most cases, EPA Regions and States are best positioned to evaluate facilities on a case by case basis and make compliance screening decisions. Where questions arise, contact the HQ national program office. If compliance issues involving multiple facilities in the same corporation are involved, contact the HQ national program office and the NWMPP contacts in Regions where other violators are located.

This screening process is designed to provide flexibility; however, there are some situations where voluntary partnership is not advised. **Participation in the National Waste Minimization Partnership Program is not be appropriate if a compliance screen shows any of the following types of violations under federal or state law:**

Criminal Activity:

- Corporate criminal conviction or plea for environmentally-related violations of criminal laws involving the facility or a facility's corporate officer within the past five years.
- Criminal conviction or plea of employee at the same facility for environmentally-related violations of criminal laws within the past five years.
- Ongoing criminal investigation / prosecution of corporation, corporate officers, or employee at the same facility for violations of environmental law.

State-based actions against a facility carry the same weight as Federal actions.

Civil Activity

- Three or more significant civil violations at the facility in the past three years.
- Unresolved and/or unaddressed Significant Non-compliance (SNC) or Significant Violations (SV) at the facility.
- One or more planned but not yet filed judicial or administrative actions at the facility.
- Ongoing EPA *or* State initiated litigation at the facility.

Exhibit 8: Guidance for Compliance screening (cont'd)

- Situation where a facility is not in compliance with the schedule and terms of an order or decree.
- In addition, EPA and the State liaison may also consider whether there could be significant problems such as, for example, a pattern of non-compliance in an applicant's overall civil or criminal compliance history. We consider this to be an area of Regional and/or State discretion.

Removing a Partner from the Program Due to Changes in Compliance Status

A situation may arise where the compliance status significantly deteriorates during the facility's participation in the program. In this situation, a facility may be discontinued from the program if Headquarters and the Regional liaison deem such action to be appropriate.

Exhibit 9: Compliance Screen Examples

- Example 1 - Compliance screen shows an ongoing criminal enforcement action at a facility applying for membership. Membership application should be declined.
- Example 2 - A large corporation operates facilities in several states. One of the corporation's facilities applies for partnership. A corporate-wide compliance screen shows this facility has no current unaddressed Significant Non-Compliance (SNC) violations, and all SNCs in its history are addressed or resolved. However, one of the corporation's facilities in a state in another Region has an unaddressed/unresolved SNC. Contact the HQ national program office, the Region and/or State NWMPP program and enforcement contacts (in the Region where the violation is located). Discuss the nature of the violation and develop a consensus on whether the application should be approved or denied. If the Region or State where the violation is located objects, the application should probably be denied.
- Example 3 - The compliance screen indicates two past SNCs were rapidly resolved by the facility. The compliance screen guidance provides flexibility for approving this application if the consensus of HQ and Regional and State contacts agree the proposed NWMPP project would be in the best interest of the government.
- Example 4 - The compliance screen indicates an applicant has an unresolved violations (not a SNC). Recent contact with the facility indicates they would like to move quickly to resolve these issues and would like to correct the violations using technology changes that would otherwise qualify for partnership in the NWMPP. Contact the HQ national program office, the Region and/or State NWMPP program and enforcement contacts to discuss the nature of the violation and develop a consensus on a solution that is in the best interest of the government. It may be desirable to develop a compliance agreement that incorporates a SEP that addresses these violations, and/or a NWMPP partnership that goes beyond compliance.

Exhibit 10: Shipping and Mailing Addresses

US Mail: U. S. EPA Waste Minimization Partnership Coordinator Waste Minimization Branch, 5302W 1200 Pennsylvania Avenue, NW Washington, D.C. 20460	Delivery Service: U. S. EPA Waste Minimization Partnership Coordinator Waste Minimization Branch, 6th floor 2800 Crystal Drive Arlington, VA 22202
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Exhibit 11: Resource Requirements for Contacting 10 Facilities and Enrolling 3 of Them

Review TRI data: identify facilities generating greatest quantities of WMPCs		4 hrs
Review waste minimization potential for top 10 facilities generating greatest quantities of WMPCs		16 hrs
Call 10 facilities to describe program and discuss partnership potential	$\frac{1}{2}$ hour per facility x 10=	5 hrs
Review enrollment application (assume 3 of 10 apply)	$\frac{1}{4}$ hour per application x 3=	1.5 hrs
Call facilities to clarify application information (e.g., narrative description of proposed project not clear for average reader)	$\frac{1}{2}$ hour per application x 3 =	1.5 hrs
Request and review compliance screen	1 to 4 hrs per app x 3 =	12 hrs
Arrange presentation of membership plaque 3 facilities and attend presentation		20 hrs
Subtotal for enrollment tasks:		(60 hrs)
Post enrollment quarterly follow up calls	$\frac{1}{2}$ hr per partner x 3 x 4 quart =	6 hrs
Review Success Story and made follow up calls	1 hr per partner x 3 =	3 hrs
Arrange Achievement Award presentation and attend presentation.		20 hrs
Subtotal for post enrollment tasks:		(29 hrs)
Total for enrollment and post enrollment tasks:		89 hrs = 2.25 weeks